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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/592,991

09/15/2006

Clemens Krebs

19626

7697

272 7590 10/10/2008  
SCULLY, SCOTT, MURPHY & PRESSER, P.C.  
400 GARDEN CITY PLAZA  
SUITE 300  
GARDEN CITY, NY 11530

EXAMINER

HEPPERLE, STEPHEN M

ART UNIT

PAPER NUMBER

3753

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/592,991	<b>Applicant(s)</b> KREBS, CLEMENS	
	<b>Examiner</b> Stephen M. Hepperle	<b>Art Unit</b> 3753	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/15/06</u> .   | 6) <input type="checkbox"/> Other: ____.                          |

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The drawings are objected to because in Fig. 1, there is an extra “9” next to the “7” that should probably be deleted. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The IDS submitted 15 September 2006 listed two patent numbers twice. The examiner believes he found the correct number for the Gute reference, and is listed on the PTO-892.

Claims 1-23 are pending.

Claims 14-15 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what is meant by “shorting” in claim 14. In claim 20, it is unclear exactly what is meant by “pot-shaped”.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 13, 16-19 and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Tarnay et al. (5,050,633). Tarnay shows valve comprising a first housing part 14 holding a closing body 22. Second housing part 24 is fit into the first housing part, provides a seat for valve 22, and seals against the overall housing into which the valve is inserted. The first housing part includes a flange and o-ring just below the numeral 34 in the figure. Regarding claim 7, absence a showing of threads, it is seen that the seat 24 is secured to the first housing part by a press/interference fit, to keep entire cartridge in one piece when removed or installed. Regarding claim 13 note the stop surface at 24. Regarding claims 16-19, note orifices 30 in the seat piece and plural radial openings 28 in the first housing part 14. Regarding claim 23, the overall cartridge screws into the valve carrier.

Claims 1-4, 7, 13, 16-19, and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Stein (DE 10014191), Stein shows valve comprising a first housing part 2 holding a “pot shaped” closing body 8. Second housing part 5 is fit into the first housing part, provides a seat 7 for valve 8, and seals against the overall housing into which the valve is inserted (o-ring 15). The first housing part includes a flange and o-ring just below the numeral 34 in the figure. Regarding claim 7, absence a showing of threads, it is seen that the seat 5 is secured to the first housing part by a press/interference fit, to keep entire cartridge in one piece when removed or installed. Regarding claim 13 note the stop surface at 24. Regarding claims 16-19, note orifices 6

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in the seat piece and plural radial openings 11 in the first housing part 2. Regarding claim 21, note close fit of the valve head with a central recess above the valve, providing an inherent damping arrangement. Regarding claim 23, the overall cartridge screws into the valve carrier.

Claims 1, 3, 4, 13, and 16-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Petursson (4,493,338). Petursson shows a valve comprising a first housing part 14 holding a “pot shaped” closing body 27. Second housing part 17 is fit into the first housing part, provides a seat for valve 27, and seals against the overall housing into which the valve is inserted (o-ring 26). The first housing part includes a flange and o-ring just below the numeral 14 in the figure. Regarding claim 13 note the stop surface at 24. Regarding claims 16-19, note orifices 6 in the seat piece and plural radial openings 11 in the first housing part 2. Regarding claim 20, Fig. 2 shows a groove overlapping radial ports 16. Regarding claim 23, the overall cartridge screws into the valve carrier.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is alternatively rejected under 35 U.S.C. 103(a) as being unpatentable over Tarnay et al. or Stein. It is not explicitly stated that Tarnay seat 24 is press fit into the first housing part. It would have been obvious to make the Tarnay or Stein seat a press fit into the first valve housing part so that the seat stays with the rest of the valve when removed.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tarnay et al. or Stein. It would have been obvious to mark either cartridge (Tarnay or Stein) as an aid to see how deep the cartridge fits in an overall housing, and/or to label the cartridge with any other marking such as a part number.

Claims 1-13, 16-20, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knapp (6,298,879) in view of Barton (5,511,831). Knapp shows a housing first part 1 receiving a second part 10 in a fixed manner. The second part includes valve seat 12 and has two outer diameters that fit in two diameters in the main (first) part. Member 12 is press fit into member 10. Barton teaches securing two fluid handling components together by press fitting, where there is a stepped diameter (like Knapp), with a conical transition between the diameters. It would have been obvious to use a conical transition between the diameters in the Knapp device as taught by Barton, and to use a press fit as taught by both references to improve sealing quality and allow assembly with fewer parts and/or machining. The overall valve is threaded into a housing so that a flange at o-ring 4 stops the valve, as well as o-rings 16 at the bottom of the seat member.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Burke et al. (6,189,561) shows a cartridge valve where second housing part 54 is

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press fit into a first housing member 32. Gute (5,107,890) shows a cartridge check valve using an interference fit between seat 28 and housing 22. Rodstein (4,966,186) shows a conical taper between a first and second housing member at seal 52.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Hepperle whose telephone number is 571-272-4913. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on 571-272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen M. Hepperle/  
Primary Examiner, Art Unit 3753

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